

CLAIMS

1. A navigation device provided with a 3D surround system including a plurality of speakers, comprising:
 - a guidance-information acquiring unit that acquires
 - 5 information on route guidance; and
 - a control unit that controls output of a guide sound so that a direction from which the guide sound is heard moves, based on the information acquired by the guidance-information acquiring unit, using at least two speakers
 - 10 among the speakers at the same time.
2. The navigation device according to claim 1, wherein the control unit controls the output of the guide sound to be heard substantially from a front side in a traveling
- 15 direction and then to be moved substantially toward a guidance direction based on the information acquired by the guidance-information acquiring unit.
3. The navigation device according to claim 2, wherein
- 20 the control unit controls output of a sound effect included in the guide sound to be heard substantially from the front side in the traveling direction, then to be moved substantially toward the guidance direction, and subsequently controls output of a guide voice included in
- 25 the guide sound to be heard substantially from the guidance direction.

4. The navigation device according to any one of claims 1 to 3, wherein the control unit carries out the control only upon the guidance just before a branch point.

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5. A navigation device provided with a 3D surround system including a plurality of speakers, comprising:

a guidance-information acquiring unit that acquires information on guidance; and

10 a control unit that controls output of a guide sound based on the information acquired by the guidance-information acquiring unit using a speaker only for low-pitched sound reproduction and a speaker other than the speaker only for low-pitched sound reproduction among the
15 speakers.

6. The navigation device according to claim 5, wherein the control unit uses the speaker only for low-pitched sound reproduction based on any one of hazard information
20 and attention-calling information in a traveling direction included in the information acquired by the guidance-information acquiring unit.

7. A navigation device provided with a 3D surround
25 system including a plurality of speakers, comprising:
a predetermined-point-information acquiring unit that

acquires information on a predetermined point; and

a control unit that controls output of a guide sound so that the guide sound is heard from a direction of the predetermined point based on the information acquired by the predetermined-point-information acquiring unit.

8. The navigation device according to claim 7, wherein the information on the predetermined point is information on a destination point in route guidance or a registered point arbitrarily set.

9. A navigation method using a 3D surround system including a plurality of speakers, comprising:
a guidance-information acquiring step of acquiring information on route guidance; and

a control step of controlling output of a guide sound so that a direction from which the guide sound is heard moves, based on the information acquired at the guidance-information acquiring step, using at least two speakers among the speakers at the same time.

10. A navigation method using a 3D surround system including a plurality of speakers, comprising:
a guidance-information acquiring step of acquiring information on guidance; and

a control step of controlling output of a guide sound

based on the information acquired at the guidance-
information acquiring step using a speaker only for low-
pitched sound reproduction and a speaker other than the
speaker only for low-pitched sound reproduction among the
5 speakers.

11. A navigation method using a 3D surround system
including a plurality of speakers, comprising:

a predetermined-point-information acquiring step of
10 acquiring information on a predetermined point; and

a control step of controlling output of a guide sound
so that the guide sound is heard from a direction of the
predetermined point based on the information acquired at
the predetermined-point-information acquiring step.

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12. A navigation program that causes a computer to
execute any one of the navigation methods according to
claims 9 to 11.

20 13. A computer-readable recording medium that stores
therein the navigation program according to claim 12.